

THE NORTHERN VARIETY OF *RANUNCULUS HISPIDUS*.

M. L. FERNALD.

MICHAUX, describing his *Ranunculus hispidus* from "sylvis Carolinae inferioribus," began his description "*R. erectus, hirsutissimus*."¹ This phrase well characterizes the plant at the southern border of its range, but northward the hirsute plant becomes rare and gradually gives way to a commoner variation with the pubescence appressed or even almost or quite wanting. Thus, of the 38 collections before the writer from New England and New York State 35 have appressed pubescence and only 3 (all from southern Connecticut) have the spreading pubescence of the more southern typical *R. hispidus*. In fact, Dr. K. C. Davis, in his treatment of the genus,² apparently wrote from his familiarity with the northern variation, for ignoring the Michaux phrase, "*R. erectus, hirsutissimus*," Davis described *R. hispidus* as "Appressed-pubescent." From New England and New York the plant with appressed pubescence or subglabrous petioles and stems extends westward to Iowa and south to the mountains of North Carolina, West Virginia, Missouri and Kansas; while typical *R. hispidus* extends well into Georgia and Arkansas. The more northern extreme is worthy varietal separation as

RANUNCULUS HISPIDUS Michx., var. **falsus**, n. var., petiolis caulibusque sericeo-strigosis vel subglabris.—Vermont and Massachusetts to Ontario and Iowa, south to Virginia, North Carolina, Missouri and Kansas. The following specimens are characteristic. VERMONT: rich hillside, Pownal, July 23, 1898, May 30, 1900, *Eggleston*, nos. 108, 1927. MASSACHUSETTS: Worcester, May 18, 1912, *Woodward*; moist field, Sturbridge, May 20, 1916, *Knowlton*; damp rocky thicket, Charlton, May 20, 1916, *Bean & Schweinfurth*; Amherst, *Blanchard et al.*; dry woods, Springfield, May 5, 1915, *Andrews*; rich open woods, Stockbridge, May 30, 1902, *Hoffmann*; in humus overlying limestone, Sheffield, May 16, 1907, *Cushman*, no. 517; dry wooded calcareous bank, Sheffield, May 30, 1919, *Bean & Fernald* (TYPE in Gray Herb.). CONNECTICUT: open woods, Franklin, June 6, 1907, *Woodward*; Middlebury, May 5, 1896, *Shepardson*; cold rocky woods, Southington, May 22, 1898, *Bissell*; dry hillside, Waterbury, May 30, 1911, *Blewitt*, no. 684; dry open woods, Salisbury, June 1, 1902, *Fernald*. NEW YORK: Westbury, *Tubby*; Harrison, April 25, 1905, *Coe*; open gravelly woods, Lick Brook, Ithaca, May 6, 1915, *Eames*, no. 4064;

¹ Michx. Fl. Bor.-Am. i. 321 (1803).

² K. C. Davis, Minn. Bot. Stud. ii. 472 (1900).

gravelly soil, dry open woods, Beebe Lake, Ithaca, August 16, 1915, *Eames & Thomas*, no. 4067; rocky crests above Shurger's Glen, Lansing, May 15, 1916, *MacDaniels & Wiegand*, no. 6447; Lake Chautauqua, June 4, 1893, *Churchill*. NEW JERSEY: Summit, May 23, 1891, *Churchill*; river banks, Camden, June, 1876 (glabrous extreme), *Martindale*. PENNSYLVANIA: West Branch of Octoraro Creek, Lancaster Co., May 6, 1891, *Heller*; near Haines Station, Lancaster Co., May 20, 1901, *Heller*. MARYLAND: Baltimore Co., May 5, 1881, *Smith*; Watersville, May 13, 1881, *Smith*. VIRGINIA: Goshen, Rockbridge Co., May 4, 1915, *Churchill*. WEST VIRGINIA: dry woods, White Sulphur Springs, May 14-17, 1914, *Hunnewell*. NORTH CAROLINA: moist places near Salisbury, Rowan Co., April 22, 1897, *Biltmore Herb.*, no. 1229b. ONTARIO: Whirlpool Rapids, Niagara, May, 1901, *J. Macoun*, no. 33,581. OHIO: Toledo, May, 1884, *Young*. INDIANA: without statement of locality or collector. ILLINOIS: rich woods near Cottonwood Station, Urbana, April 17, 1909, *Pease*, no. 11,807; low woods near Crystal Lake, Urbana, April 27, 1909, *Pease*, no. 11,825 (smoother form); Ottawa, *Huett*; moist cleared timberland, Macon Co., May 9, 1915, *Clokey*, no. 2384. WISCONSIN: Preble, Brown Co., May 21, 1892, *Schuette*. IOWA: Marshalltown, May 15, 1897, *Ball*, no. 471; Ames, May 22, 1897, *Ball & Preston*, no. 465. MISSOURI: St. Louis, 1877, *Eggert*. KANSAS: woods, Wyandotte Co., May 3, 1897, *Hitchcock*, no. 1105.

Many of the specimens above cited have been distributed as *R. septentrionalis*, a northern species of swamps and meadows with much coarser stems and leaves and with stout and very long repent stolons developing soon after the expansion of the first flowers.

GRAY HERBARIUM.

HABENARIA PSYCODES, VAR. ECALCARATA IN VERMONT.—Last August there was sent me a peculiar orchid which had been collected by Dr. Anne E. Perkins in a meadow at Berkshire, Vt. Prof. Ames later determined it as the peloric form of *Habenaria psycodes* described, figured and named var. *ecalcarata* by Miss M. M. Bryan.¹

In this form (for it seems to be a teratological development rather than a true variety) the usual three-parted, spurred and fringed lip is replaced by an oblong-ovate, spurless petal, entire and wholly similar to the other petals, except that it occasionally bears small irregular and jagged marginal projections which remotely suggest its relationship to the normal type of lip. The result is a nearly

¹ Ann. Mo. Bot. Gard. iv. 38 (1917).